



PIKES et al.
Application No.: 09/458,302

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JAN 15 2002

as follows.

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PATENT

Please amend the specification in adherence with 37 C.F.R. §§ 1.821-1.825 as

In the Specification:

Please amend the specification as follows. A marked up version of the amendments is attached hereto (Appendix A). Please replace the paragraph beginning at page 51, line 3, with the following:

--In certain embodiments, the T helper peptide is one that is recognized by T helper cells present in the majority of the population. This can be accomplished by selecting amino acid sequences that bind to many, most, or all of the HLA class II molecules. These are known as "loosely HLA-restricted" or "promiscuous" T helper sequences. Examples of peptides that are promiscuous include sequences from antigens such as tetanus toxoid at positions 830-843 (QYIKANSKFIGITE; SEQ ID NO:2382), *Plasmodium falciparum* circumsporozoite (CS) protein at positions 378-398 (DIEKKIAKMEKASSVFNVVNS; SEQ ID NO:2383), and *Streptococcus* 18kD protein at positions 116 (GAVDSILGGVATYGAA; SEQ ID NO:2384). Other examples include peptides bearing a DR 1-4-7 supermotif, or either of the DR3 motifs.--

Please replace the paragraph beginning at page 51, line 12, with the following:

--Alternatively, it is possible to prepare synthetic peptides capable of stimulating T helper lymphocytes, in a loosely HLA-restricted fashion, using amino acid sequences not found in nature (see, e.g., PCT publication WO 95/07707). These synthetic compounds called Pan-DR-binding epitopes (e.g., PADRE™, Epimmune, Inc., San Diego, CA) are designed to most preferably bind most HLA-DR (human HLA class II) molecules. For instance, a pan-DR-binding epitope peptide having the formula: aKXVAAWTLKAAa (SEQ ID NO:2385), where "X" is either cyclohexylalanine, phenylalanine, or tyrosine, and "a" is either D-alanine or L-alanine, has been found to bind to most HLA-DR alleles, and to stimulate the response of T helper lymphocytes from most individuals, regardless of their HLA type. An alternative of a pan-DR binding epitope comprises all "L" natural amino acids and can be provided in the form of nucleic acids that encode the epitope.--

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Please replace the pages set forth below with the substitute pages attached hereto in Appendix B. Marked up copies of the pages showing amendments are provided in Appendix A.

B 3

- Please substitute page 100 (Table IV), the attached Substitute Sheet, page 100.
- Please substitute page 101 (Table V) with the attached Substitute Sheet, page 101.
- Please substitute pages 143-148 (Table XIX) with the attached Substitute Sheets, pages 143-147.
- Please substitute pages 149-152 (Table XX) with the attached Substitute Sheets, pages 149-152.
- Please substitute page 154 (Table XXII) with the attached Substitute Sheet, page 154.
- Please substitute page 155 (Table XXII A) with the attached Substitute Sheet, page 155.
- Please substitute page 156 (Table XXII B) with the attached Substitute Sheet, page 156.
- Please substitute page 157 (Table XXIIC) with the attached Substitute Sheet, page 157.
- Please substitute page 158 (Table XXIII) attached Substitute Sheet, page 158.
- Please substitute page 159 (Table XXIV A) with the attached Substitute Sheet, page 159.
- Please substitute page 160 (Table XXIV B) with the attached Substitute Sheet, page 160.
- Please substitute page 162 (Table XXVI) with the attached Substitute Sheet, page 162.
- Please substitute page 163 (Table XXVII) with the attached Substitute Sheet, page 163.
- Please substitute page 164 (Table XXVIII) with the attached Substitute Sheet, page 164.
- Please substitute page 165 (Table XXIX) with the attached Substitute Sheet, page 165.
- Please substitute page 166 (Table XXX) with the attached Substitute Sheet, page 166.
- Please substitute page 167 (Table XXXI) with the attached Substitute Sheet, page 167.
- Please substitute page 168 (Table XXXII) with the attached Substitute Sheet, page 168.

Please insert the accompanying paper copy of the Sequence Listing, page numbers 1 to 510, at the end of the application.

REMARKS

Applicants request entry of this amendment in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment contains no new matter. Applicants note that when the Substitute Sheets for Table XIX (pages 143-148 as filed, pages 143-147 as amended) were prepared, the number of pages changed due to re-formatting. Thus, all of the disclosure of Table XIX in pages 143-148 as-filed is now included in pages 143-147 of the amended Table XIX.